

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property
Organization
International Bureau



(43) International Publication Date
26 August 2004 (26.08.2004)

PCT

(10) International Publication Number
WO 2004/072262 A2

- (51) International Patent Classification⁷: **C12N**
- (21) International Application Number:
PCT/US2004/003974
- (22) International Filing Date: 10 February 2004 (10.02.2004)
- (25) Filing Language: English
- (26) Publication Language: English
- (30) Priority Data:
60/446,474 10 February 2003 (10.02.2003) US
- (71) Applicant (for all designated States except US):
NORTHWEST BIOTHERAPEUTICS, INC. [US/US];
22322-20th Avenue S.E., Suite 150, Bothell, WA 98021
(US).
- (72) Inventors; and
(75) Inventors/Applicants (for US only): **SHANKAR, Gopi**

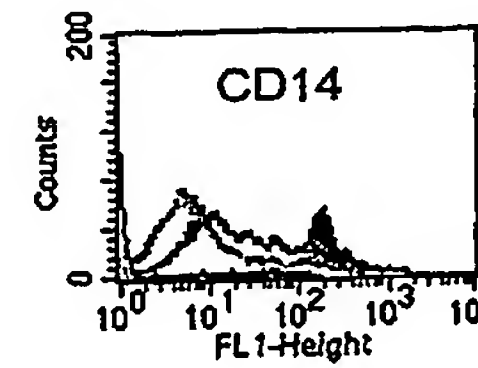
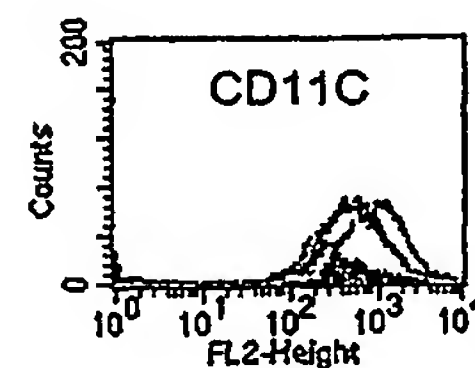
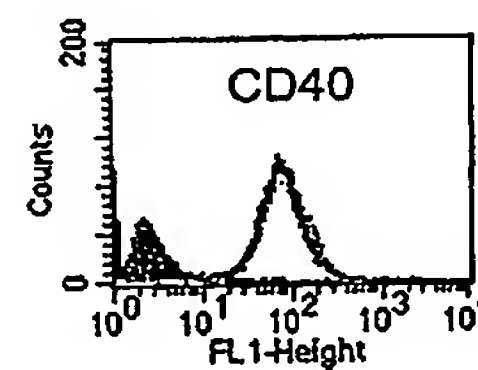
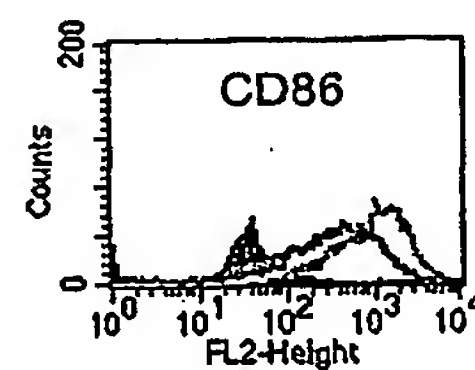
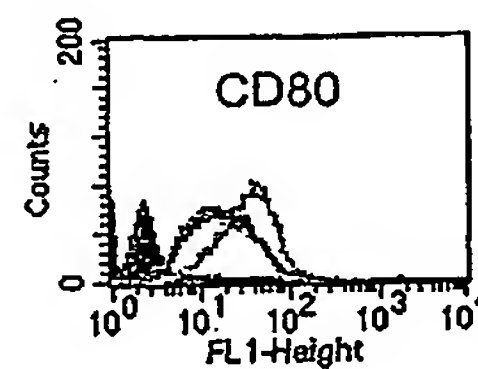
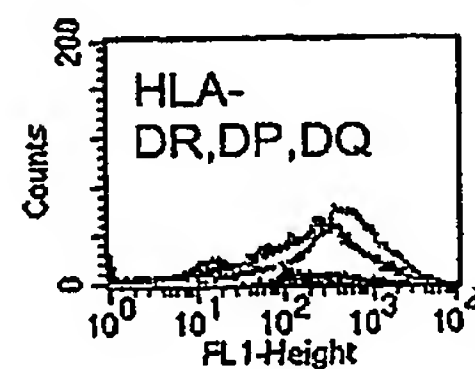
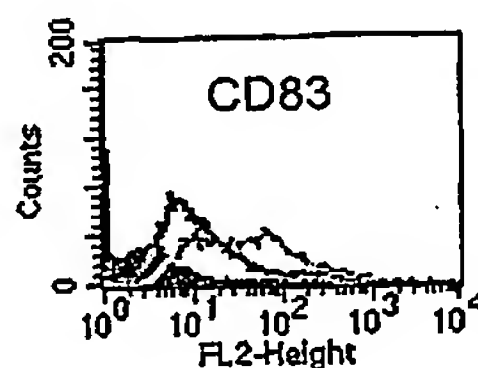
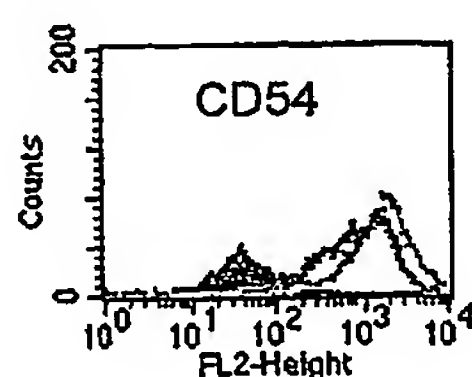
[IN/US]; 400 Char Sam Blvd., Chester Springs, PA (US).
LODGE, Patricia A., [US/US]; 11630 N. Dragoon
Springs Drive, Oro Valley, AZ (US). **PESTANO, Linda**
A., [US/US]; 3825 170th Street, S.W., Lynnwood, WA
98037 (US).

(74) Agents: **POOR, Brian W.**, et al.; **TOWNSEND and**
TOWNSEND and CREW, LLP, Two Embarcadero Center,
8th Floor, San Francisco, CA 94111 (US).

(81) Designated States (unless otherwise indicated, for every
kind of national protection available): AE, AG, AL, AM,
AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN,
CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI,
GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE,
KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD,
MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG,
PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM,
TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM,
ZW.

[Continued on next page]

(54) Title: **CULTURED CD14⁺ ANTIGEN PRESENTING CELLS**



(57) Abstract: The present invention provides isolated CD14⁺ anti-
gen presenting cells, e.g., dendritic cells and isolated and enriched
populations thereof as well as methods for isolation and enrichment.
Also provided are methods for using the CD14⁺ antigenpresenting
cells to modulate T cell responses *in vivo*, *in vitro*, and *ex vivo*.



(84) **Designated States** (*unless otherwise indicated, for every kind of regional protection available*): ARIPO (BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

Declaration under Rule 4.17:

— *of inventorship (Rule 4.17(iv)) for US only*

Published:

— *without international search report and to be republished upon receipt of that report*

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.